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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/605,512	10/03/2003	Floyed Jeffries Duncan Jr.		2511

36455 7590 05/24/2005
FLOYED JEFFRES DUNCAN JR
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BRENTWOOD, TN 37027

EXAMINER

KERSHTEYN, IGOR

ART UNIT PAPER NUMBER

3745

DATE MAILED: 05/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/605,512

Applicant(s)

DUNCAN, FLOYD JEFFRIES

Examiner

Igor Kershteyn

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 April 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claim 01/24/2005 have been considered but are moot in view of the new ground(s) of rejection.

The drawings have amended to overcome drawings objections set forth in the first Office action. The specification has been amended to correct grammatical errors. The claims have been amended.

The above matters are appreciated.

Drawings

The drawings were received on 04/14/2005. These drawings are objected because they contain text and headings.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the housing with varying radii along the axis, energy off take accomplished by an axial shaft at the center of the housing, the design of the baffle allowing a small leakage at the exterior radius and the center radius must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

The drawings are further objected to because:

Figure 1 contains two figures that are partial views and should to be labeled as separate figures, all the text and heading, beside the parts labels, should to be deleted.

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Figure 2 contains two figures that are partial views and should to be labeled as separate figures, all the text and heading, beside the parts labels, should to be deleted, each figure should have it's own separate labels and lead lines from the labels to the part it designates.

Figure 3 contains text and heading that should to be deleted, labels "Fluid", "Cylinder walls", and "Helical baffle" should remain.

Figure 4 contains two figures that are partial view and a graph and should to be labeled as separate figures, all the text and heading, beside the parts labels, name of the graph and graph legends, should to be deleted.

Figure 5 contains two figures that are symbolic views and should to be labeled as separate figures, all the text and heading, beside the parts labels, should to be deleted, each figure should have it's own separate labels and lead lines from the labels to the part it designates.

Figure 6 contains of two figures that are partial views and should to be labeled as separate figures, all the text and heading, beside the parts labels, should to be deleted, each figure should have it's own separate labels and lead lines from the labels to the part it designates.

Figure 7 contains text and heading that should to be deleted.

Figure 8, as amended" contains text and heading that should to be deleted, label "Mechanism to allow rotation around the axis while constraining axial motion " should remain.

Figure 9 contains text and heading that should to be deleted.

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In figure 10, as amended, curved lead line between the label "Replacement Sheet" and the device should be deleted.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure, as amended, is objected to because of the following informalities:

In page 1, lines 2-11 and page 2, lines 1-9 should be deleted. If Applicant would like to include the section "Appendix Data" in the specification, the Examiner suggests placing the section in the last page of the specification.

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In page 2, lines 10-16 should be deleted.

In page 4, lines 14 and 18, page 5, lines 7, 11, and 16, page 6, lines 2, 6, 13, and 20, "512" should be changed to --the invention--,

In page 7, line 11, page 8, lines 1, 6, 12, and 18, page 9, lines 4 and 9, "PTO" should be changed to --Patent--,

In page 11, lines 7, 10, 13, 15, and 17, page 12, lines 1, 3, 5, 8, and 10, "Drawing" should be changed to "Figure",

In page 13, "(notwithstanding claim 8)" should be deleted because claims should not be mentioned in the specification,

In page 18, lines 8 and 10, page 19, lines 1, 3, and 17, page 20, lines 2, 5, 14, and 15, "Drawing" should be changed to --Figure--.

Appropriate correction is required.

Claim Objections

- Claims 1-3, 9, and 13 are objected to because of the following informalities:

In claim 1, line 11, "introduce" should be --introduced--,

In claim 2, line 2, "where in" should be --wherein--,

Claim 3 recites the limitation "the supplying reservoir" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 9, in line 4, "(exterior radius)" should be deleted because only reference characters should be used with paranthesis.

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Claim 9 recites the limitation "the helix" in line 4. There is insufficient antecedent basis for this limitation in the claim. Examiner suggests changing the limitation "helix" to --helical baffle--.

Claim 13 recites the limitation "the supplying reservoir" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, in lines 3 and 4, recites "sealed at the exterior radius and open or sealed at the exterior radius; positioned at an angle of >0 and <90 degrees from horizontal" which is indefinite because it is unclear to which part of the structure these limitations refer. Examiner suggests adding --said helical baffle is-- before "sealed" and --said generally cylindrical housing is-- before "positioned" which would make it clear to which part of the structure these limitation refer.

Claim 1, in lines 8-10, recites "with a mechanism of mechanical transfer from the housing to off take rotational mechanical energy and transfer it to some form of productive use" which is indefinite because it is unclear to what form of productive use

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the energy is transferred and how it is different from "kinetic, mechanical, and frictional energy" limitation recited in lines 15-16.

Claim 9, in lines 3-9, recites "sealed at the junction of the helical baffle and the cylindrical housing (exterior radius) but allowing the helix to rotate relative to the housing and open or sealed at the interior radius; positioned at an angle of >0 and <90 degrees from horizontal; the baffle being supported by a mechanism allowing rotation around the axis of the housing while constraining axial motion" which is indefinite because it is unclear to which part of the structure these limitations refer. Examiner suggests adding --said helical baffle is-- before "sealed" in line 3, and --said generally cylindrical housing is-- before "positioned" in line 6 which would make it clear to which part of the structure these limitations refer.

Claim 9, in lines 10-12, recites "with a mechanism of mechanical transfer from the housing to off take rotational mechanical energy and transfer it to some form of productive use" which is indefinite because it is unclear to what form of productive use the energy is transferred and how it is different from "kinetic, mechanical, and frictional energy" limitation recited in lines 17-18.

Claims 2-8, and 10-14 are indefinite by virtue of their dependency on claims 1 and 9.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4, and 6, as far as they are definite, are rejected under 35

U.S.C. 102(b) as being anticipated by Morrison (928,782).

In figures 1-3, Morrison teaches a device utilizing a helical baffle 3 contained in a generally cylindrical housing 2; sealed at the exterior radius and open or sealed at the interior radius; positioned at an angle of >0 and <90 degrees from horizontal; the housing 2 being supported by a thrust bearing 4,5,6 allowing rotation around the axis of the housing 2 while constraining axial motion; with a mechanism 7,8,10,11,12,13 of mechanical transfer from the housing 2 to off take rotational mechanical energy and transfer it to some form of productive use; whereby a fluid is introduced in to the high end of the housing/baffle assembly and while causing rotation of the housing 2 and baffle 3 is conveyed to the lower end and discharged; thus extracting potential energy and converting same to kinetic, mechanical and frictional energy.

Claims 1, 2, 4, and 6, as far as they are definite, are rejected under 35

U.S.C. 102(b) as being anticipated by Toyama (4,272,685).

In figures 1-6, Toyama teaches a device utilizing a helical baffle 32 contained in a generally cylindrical housing 30; sealed at the exterior radius and open or sealed at the interior radius; positioned at an angle of >0 and <90 degrees from horizontal; the housing 30 being supported by a thrust bearing 31 allowing rotation around the axis of the housing 30 while constraining axial motion; with a mechanism 24,34 of mechanical

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transfer from the housing 30 to off take rotational mechanical energy and transfer it to some form of productive use; whereby a fluid is introduced in to the high end of the housing/baffle assembly and while causing rotation of the housing 30 and baffle 32 is conveyed to the lower end and discharged; thus extracting potential energy and converting same to kinetic, mechanical and frictional energy.

Allowable Subject Matter

Claims 3, 5, 7 and 8 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claims 9-14 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

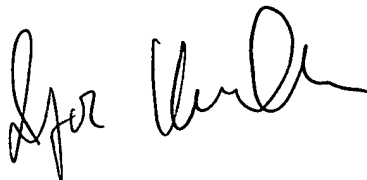
Contact information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Kershteyn whose telephone number is **(571)272-4817**. The examiner can be reached on Monday-Friday from 8:00 a.m. to 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look, can be reached on **(571)272-4820**. The fax number is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308 0861.

IK
May 20, 2005



**Igor Kershteyn
Patent examiner.
Art Unit 3745**



**EDWARD K. LOOK
SUPERVISORY PATENT EXAMINER
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5/23/05